Mapping Industrial Heritage Sites in Egypt: Identification & Management

Shreen Mohamed Amin, Hosam Refai and Rasha Kamal &

Abstract

The emphasis in this paper is on analyzing the context of industrial heritage in Egypt. The context of Industrial heritage reveals identity, cultural traditions and memories of work, a fundamental part of industrial culture. It is a part of urban transformation in the city, and its planning practices. In the last 30 years, awareness of the importance of industrial heritage in understanding history increased, and the new definition of Industrial Heritage started representing meaning in our history. The industrial heritage in Egypt is an important point of analysis as it could offer economic, cultural, and social benefits to the community. The objective of this research is to examine the context of industrial heritage in Egypt and find effective strategies for raising awareness of its importance. The paper sheds light on the Laws and legal procedures for managing the industrial heritage in Egypt, and the ways to document the industrial heritage tools, devices, mechanisms. Then, the paper presents a management plan for the Egyptian industrial heritage that could contribute to safeguard, interpret, and promote such aspects of cultural heritage.

Key Words:

Mapping - industrial Heritage – Context – Document

Introduction

The TICCIH charter, Nizhny Tagil Charter, for the identification and protection of industrial heritage that was signed in Moscow 2003 by TICCIH organization and ICOMOS states the importance of recording the physical features and condition of the objects of industrial heritage especially in the industrial sites; such recording should be placed in a public archive because they provide evidence of activities, tell stories, and increase our sense of identity and understanding of cultures. The TICCIH charter sheds light on the process of recording such types of heritage that should include "written descriptions, drawings, photographs and video film of moving objects, and references to supporting documentation". TICCIH charter highlights the intangible aspects of industrial heritage where the working memories of people involved in any industrial activity are unique and irreplaceable resources and should be recorded because these memories elaborate their social activities, as well as the intangible records of any industrial activity contained in memories. TICCIH charter states the importance to identify the extent of the industrial heritage where any particular industrial typologies should be analyzed and documented; then such documentation should be freely accessible to the public. Policies for the protection of the industrial heritage should be added to the programs of historical research. Such policies are the way to safeguard many industrial activities in various sites. TICCIH charter identifies the criteria for assessing industrial heritage; the criteria identify the most important existing landscapes, sites, settlements, buildings, structures, machines, and processes. The charter also sheds light on the importance of listing strong legal measures that ensure the conservation of industrial heritage. TICCIH charter states the tremendous impact that industrialization has had on human culture, where all these aspects should be considered by The World Heritage List of UNESCO.

Measures for maintaining and conserving the Industrial heritage depend on the preservation of the functional integrity of such kind of heritage. The Measures for conserving the Industrial heritage requires a thorough knowledge of the various

4. TICCIH the Nizhny Tagil Charter for the Industrial Heritage, 3-4.
industrial processes which may have taken place in the industrial sites. The various industrial processes include all the former uses that should be examined and assessed. ICOMOS charter states the possibility of the rehabilitation and possible adaptation of an industrial site to ensure its conservation, and this possibility couldn’t be accepted if the site has an especial historical significance where the original patterns of circulation and activity of such kind of heritage should be respected. It highlights the importance of conserving the human skills involved in many industrial processes that should be carefully recorded and transmitted to younger generations. 

The Industrial Heritage Analysis that was conducted by the UNESCO World Heritage Centre Asia-Pacific Region states that the category “Industrial Heritage” is an under-represented category of cultural (including industrial), natural and mixed sites and inscribed on the UNESCO World Heritage List. In 1999, the World Heritage Centre in collaboration with ICOMOS listed the classification of World Heritage sites that included Industrial Heritage sites. This list was decided upon and decreed by the UNESCO World Heritage Centre annually. Industrial Heritage is considered by the World Heritage Committee and the ICOMOS analysis as an under-represented category on the World Heritage List. The Industrial Heritage Analysis of the UNESCO World Heritage Centre Asia-Pacific defines Industrial heritage as “The Industrial Revolution that profoundly modified lifestyles and landscapes, and the means employed to extract raw materials and exploit the agricultural products and minerals resulted in grandiose constructions and great achievements, testifying to the creative genius of mankind where Industrial sites are important milestones in the history of humanity. Therefore, they embody the hope of a better life and the ever-greater power over matter.” The classification of World Heritage sites was initially prepared in 1999 by the World Heritage Centre in collaboration with ICOMOS. It included 28 sites that are considered Industrial Heritage where such kind of heritage embraces 5.3% of all cultural sites and 4% of all World Heritage Sites. The Industrial Heritage Analysis of the UNESCO World Heritage Centre Asia-Pacific also sheds light on the difference of the cultural components (including industrial) of each region. UNESCO World Heritage Centre Asia-Pacific Analysis listed twenty-eight inscribed industrial heritage sites classified by region; twenty-two of which are found in Europe/North America regions, four in both Latin America/Caribbean region and two in Asia/Pacific region. According to the list, there are no Industrial Sites on the World Heritage List in Africa and the Arab States. (Diagrams 1, 2)

The testimonies of industrialization have played an important role in both urban and rural territorial evolution, forming the historical and cultural character of its sites, places, and landscapes. Each Architectural design, landscape, industrial facility, or site has a unique identity that should be kept alive in any process of intervention, restoration, or conservation.” The Industrial Heritage Analysis of UNESCO World Heritage List identifies the Tentative Industrial World Heritage Sites in the Arab States. Figure 1 expresses the map of this Tentative list where no Industrial Heritage sites are on the List, and only three Industrial Heritage Sites with very special topics are listed as mixed sites on the Tentative List; the three sites are mixed industrial and commercial centers for metallurgical industry of gold, iron and copper in Mauritania, power sources and prime movers, There is an exceptional water wheel system in Hama, Syria, specialized structures and objects show at Industrial Heritage Sites with very special topics are listed as mixed sites on the Tentative List of World Heritage Sites, Places, and Landscapes. Each Architectural design, landscape, industrial facility, or site has a unique identity that should be kept alive in any process of intervention, restoration, or conservation.” The Industrial Heritage Analysis of UNESCO World Heritage List identifies the Tentative Industrial World Heritage Sites in the Arab States. 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Main Features of the Egyptian Industry are points of analysis. Egypt has witnessed an industrial renaissance in the 19th century by “Muhammad Ali” whose era is known for the establishment of a major industrial base, which included textiles and sugar industry, production of oil, rice, and military industries, where the sugar industry started in 1835, the textile industry in 1911, and phosphate fertilizers in 1937. The iron industry started in 1948, nitrogenous fertilizers in 1954 and all these activities were based on the efforts of the private sector such as Banque Misr which was established in 1920. Since 1948, there were several attempts to manufacture iron and steel, where three companies were established: the Egyptian copper factories, the Delta Steel factories, and the National Company for Metal Industries. The Egyptian Iron and Steel Company was the first integrated project that elaborated Egypt’s iron industry that depends on iron ore, the construction of the company started in 1956. Several industrial heritage contexts are identified in Egypt; analyzing such cases reveals the different core values of the industrial heritage in Egypt. The first case of the industrial heritage contexts in Egypt is traceable in the Red Sea Governorate (Al Qusayr), a city in eastern Egypt, located on the Red Sea coast. The old factories of the phosphate industry dating back to 1910 reflect the industrial heritage context in that governorate. First examples of a case are the factories of Al Qusayr which reveal the importance of the Egyptian industrial heritage in safeguarding the identity of the Red Sea Governorate, ensuring that one of the major industries is the Phosphate industry. Figures 6-7-8 show the current situation of one of the old Phosphate factories of Al Qusayr, where industrial devices dating back to the 19th century in Egypt were used in Phosphate production, in a very bad condition where the owning company sold old machinery as scrap. Other industrial devices could be found in Al Qusayr citadel, a historical castle built during the Ottoman era by Sultan Selim II to protect pilgrims and commercial caravans. Near the eastern tower of the citadel, old mining tools are on display focusing on the phosphate company of Al Qusayr that was established by Italians Engineers in 1916. Figures 9-10 show the carriages that were used to transport phosphates in the early 20th century; the carriages were gifts by the Al Qusayr Phosphate Company. The citadel is now under the authority of the Egyptian Ministry of Tourism & Antiquities.

The second case of industrial heritage contexts in Egypt is the Minet El-Bassal region near the Mahmoudiya Canal, Alexandria Port. It was a famous Alexandrian Industrial district till the issuance of the decree N.36 in 1967 by the former president Gamal Abdul Nasser. The decree aims to end the enforcement of the Stock Exchange of Minet El-Bassal as the main center for mapping Industrial Heritage Sites in Egypt: Identification & Management
the cotton industry in Egypt. The region of Minet El-Bassal was established in 1810, housing the international trade center headquarters; it was a world marketing center for Egyptian cotton. Many of the cotton factory buildings in Minet El-Bassal are still accessible at El Faiyum (figures 14–17).

The sixth case of the industrial heritage contexts in Egypt is located at Al Qahira (figures 18–20). This is reflected the extensive industrial development in this area.

The third case of the industrial heritage contexts in Egypt are the factories of textile manufacturing at El Mahalla El Kubra, El Charbeya Governorate. Textile machinery had been in operation since 1872 when Mir Spinning and Weaving was established, as one of Banque Misr companies founded by “Talaat Harb” in 1920 when the company named Mir Spinning and Weaving began production in 1930 and the number of its spindles was 12,200, reaching 300,000 spindles, including six spinning factories. At the beginning, it also contained 484 looms of textiles. Several industrial factories of El Mahalla El Kubra factories are historical industrial devices such as its machines that had been used since 1872 in printing and other machines used since 1810 in spinning; the latter machines were manufactured in England and were introduced into Egypt 212 years ago. Figure 11 shows one of the industrial heritage machines used in Egypt in Cotton spinning, made by the British Sir Richard Arkwright (23 December 1732 – 3 August 1792) who was a leading entrepreneur and an English inventor during the early Industrial Revolution. This machine enables the spinning of 12 threads only by one person; it is worth pointing out that the Egyptian Ministry of Public Business Sector stated in 2019 the plan of the Textile factories’ development in El Mahalla El Kubra.

The fourth case of the industrial heritage contexts in Egypt is a printing machine that could be traced at Khan Al-Zarakhsheh and Al-Nahhali, Al-Azhar Street Cairo; Al-Sabeeh Library and Print House is one of the distinctive places at Al-Azhar Street. The early printer used in the print house of Al-Sabeeh Library reveals the value of the industrial devices used during the 18th century in Egypt. A printing machine dating back to the 19th century was used in the activities of Al-Sabeeh Library; it is kept nowadays under the authority of the Egyptian Ministry of Tourism & Antiquities and Illustrated Cairo Project Sector. Figures 12–13 show the display of the 19th-century printing machine in one of the old structures of Al-Azhar Street; under the authority of the Illustrated Cairo Project Sector.

The fifth case of the industrial heritage contexts in Egypt is traced to El Faiyum, a city in Middle Egypt; in 1936, where a hydraulic power station was built, and began producing electricity by 1940. The station was used for many villages with electricity in the Faiyum Governorate, in addition to levitation levitating of water to about 5,000 agricultural lands for the family in the Faiyum Governorate; it is now under the authority of the Ministry of Tourism and Antiquities and the owner of the factory.

The archival photos of the industrial machinery in Egypt employ both history and significance of such types of heritage. The archival photos of the industrial machinery in Egypt employ both history and significance. It was the first vinyl company established in the late 1940s at the first Egyptian record-keeping company under the name “Masrawi”. Industrial heritage devices linked with the composer Mohamed Fawzi reveal intangible aspects of money-oriented heritage; (figures 28-31) including archival photos of the industrial devices in the first Egyptian record-keeping company and factory during the fifties from Makram Salama archive.

Setting a management plan for the Egyptian industrial heritage can contribute to safeguard, interpret, and promote this important aspect of Egypt’s cultural heritage. The key starting point of preparing the strategy for managing the industrial heritage in Egypt is the implementation of the Burra Charter Process, which listed the stages for managing the cultural heritage and could be applied in the case of managing Egyptian industrial heritage. Defining the value of the industrial heritage in Egypt requires assembling data of the industrial heritage condition in both museums and industrial sites, as well as applying a special natural scientific-analytical work that might face the increasing loss during historical documentation. All factors and concerns
affecting the definition of the current situation of the Egyptian industrial heritage or related machinery needs to be analyzed in terms of physical factors, the material condition of industrial machinery, conservation needs, level of authenticity, legal requirements for protecting industrial heritage and a list of interests of all stakeholders to reach the preservation process.

The phases of the strategy that could be set for managing Egyptian Industrial Heritage can be divided into the following within which the stakeholders and the Egyptian community can participate in all phases of the process. The phases are:

1. Understand the significance and value of the industrial heritage in Egypt
2. Develop a policy to define, manage, and promote the Egyptian industrial heritage
3. Manage the Egyptian industrial heritage based on regulations.

The foundations of the regulations can be introduced with regard to the following aspects:

- Forming a national committee to represent the managing policy of the Egyptian industrial heritage in terms of the guidelines of the International Committee for the Conservation of the Industrial Heritage, TICCIH, and a world organization for industrial heritage,
- All current Egyptian conservation laws should use specific terms to define and protect the industrial objects and industrial buildings in Egypt. Such laws should be considered when planning and during the process of decision-making which ought to include the public.
- Defining the industrial heritage sites in Egypt by promoting their outstanding industrial value, in order to play a key role in worldwide technical developments. Industrial heritage sites in Egypt with outstanding universal value need to be listed on the world heritage list. The latter would lead to introducing a new approach of viewing Egyptian industrial heritage of both technical and industrial landscapes. Finally, such foundations support the prioritization of protecting the Egyptian industrial heritage in terms of social and political discourse.

Conclusion

In the current context of the Egyptian industrial heritage, it has become apparent that it is important to define, set, and apply conservation, education, and interpretation procedures. Strengthening the three mentioned scopes can contribute to safeguarding the value of the industrial history of Egypt. All current Egyptian conservation laws ought to use specific terms to define and protect the mechanical objects and industrial buildings in Egypt. A strategy for managing the industrial heritage in Egypt should be set by the Egyptian government that could enable efficient documentation, interpretation, and preservation of the Egyptian industrial heritage. The value of heritage defines the importance of preserving heritage for the sake of the preservation of the past, to define it in the present and to take care of its stability into the future.  

Figures

Diagram 1. UNESCO World Heritage Centre Asia-Pacific Analysis. Africa & Arab states including Egypt do not have any industrial heritage sites included in the list of UNESCO, Even though, Arab states especially Saudi Arabia are working on documenting the industrial heritage as a national campaign, they did not apply for nominating their industrial heritage sites to be listed on the list of UNESCO. Source: Michael Falser, Global Strategy Studies Industrial Heritage Analysis World Heritage List and Tentative List (UNESCO World Heritage Centre Asia-Pacific Region; Austria, 2001). 4-6. https://whc.unesco.org/archive/ind-study01.pdf

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Figures 4-5 show the announcement of the Saudi Ministry of Culture competition for documenting the industrial heritage in Saudi Arabia in the country’s national campaign. Saudi Arabia did not apply for nominating their industrial heritage site to be listed on UNESCO’s list because, up to this moment, they are working to document such sites. However, it is the only country that has started this national campaign.


Figures 6-7: The current situation of one of the old Phosphate factories of Al Qusayr ©ShreenMohmed, 8 August 2019

Figures 8-10: The carriages that were used to transport phosphates in the early 20th century. Al Qusayr ©ShreenMohmed, 8 August 2019
Figures 11 One of the industrial heritage machines used in Egypt in Cotton spinning; made by the British Sir Richard Arkwright Eric Evans

Figures 12-13 The 19th-century printing machine in one of the old Islamic schools at Al-Azhar Street; currently their location is under the authority of the Historic Cairo Project Sector ©ShreenMohmed, May 7, 2018

Figures 14-17 The old and new turbine motors at El Faiyum Power Station ©ShreenMohmed, January 9, 2020 & explore Fayoum, accessed May 31, 2020
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Figures 18-19 Al Nasr Auto Factory & the Iron and Steel Company
Figures 20-21 One of the military factories in Helwan and the first Cairo jet plane

Figures 22-23 The old cotton factory & laboratory for ginning cotton in Qalyubia governorate ©ShreenMohmed, March 9, 2019

Figures 24-25 Mechanical looms in AlAbbassia ©ShreenMohmed, December 7, 2019

Figures 26-27 The traditional looms & Al-Qattan Carpet Factory ©ShreenMohmed, December 7, 2018

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